Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A transmission for an all-terrain vehicle with an engine comprising:

a variable-speed drive operatively connected to the engine, and

a gear transmission mechanism operatively connected to the variable-speed drive, the gear transmission mechanism including:

a single shifting fork for selecting at least a forward high-speed ratio, a forward low-speed ratio, neutral ~~or~~and reverse,

a shifting lever disposed at a position below a right end part or a left end part of a handlebar at a level above the engine, the shifting lever extending substantially upward,

a single change lever shaft connected with the shifting fork, the change lever shaft being disposed on the same side as the side on which the shifting lever is disposed with respect to a longitudinal center axis of the all-terrain vehicle, and the change lever shaft extending substantially upward at an end part in a right-and-left direction of a rear end part of the engine, and

a single connecting member connecting the change lever shaft and the shifting lever, the connecting member including a substantially straight single connecting rod extending in a back-and-forth direction at a right or left side ~~of~~with respect to the engine.

2. (Original) The transmission for an all-terrain vehicle according to claim 1, wherein the gear transmission mechanism further comprises a torsion coil spring wound around the change lever shaft so as to connect the change lever shaft and the shifting fork via the torsion coil spring.

3. (Currently Amended) The transmission for an all-terrain vehicle according to claim 1, wherein the gear transmission mechanism further comprises a gate member provided with a longitudinal guide slot extending in the back-and-forth direction for guiding the shifting lever, the guide slot being provided in the same side edge of right or left with retaining parts for retaining the shifting lever at positions corresponding to the forward low-speed ratio, the forward high-speed ratio, neutral and reverse.

4. (Original) The transmission for an all-terrain vehicle according to claim 3, wherein an intermediate stopper for temporarily holding the shifting lever in a neutral state is formed in a section of the guide slot between the retaining part for the forward high-speed ratio and the retaining part for the forward low-speed ratio.

5. (Original) The transmission for an all-terrain vehicle according to claim 3, wherein the shifting lever is supported in a spherical bearing mechanism such that the shifting lever can be tilted forward, rearward, rightward and leftward, the shifting lever being biased by a spring toward the side edge of the guide slot in which the retaining parts are provided.

6. (Canceled)

7. (Currently Amended) A gear position detector for an all-terrain vehicle with a gear transmission mechanism disposed in a transmission case, the gear transmission mechanism including a single shifting rod ~~and a shifting sleeve and being capable of~~ for changing gear position ~~by moving the shifting sleeve~~ by an axial movement of the single shifting rod, comprising:

a gear-position detecting switch mounted to the transmission case at a position near one axial end of the single shifting rod, the gear-position detecting switch being configured to detect a neutral position when the axial end of the single shifting rod axially moves to a neutral position and engages the gear-position detecting switch or a reverse position when the

axial end of the single shifting rod axially moves to a reverse position and engages the gear-position detecting switch.

8. (Currently Amended) The gear position detector for an all-terrain vehicle according to claim 7, wherein the gear transmission mechanism can be selectively placed in one of two forward speeds, neutral and reverse by operating ~~a~~ the single shifting rod, and

wherein the gear-position detecting switch is disposed so as to detect the neutral and reverse positions with respect to the single shifting rod.

9. (Original) The gear position detector for an all-terrain vehicle according to claim 8, wherein the gear-position detecting switch includes a neutral-position detecting switch and a reverse-position detecting switch which are independently mounted from each other.

10. (Currently Amended) The gear position detector for an all-terrain vehicle according to claim 9, wherein the reverse-position detecting switch is disposed opposite to one axial end of the single shifting rod, and

wherein the neutral-position detecting switch is disposed near the same axial end of the single shifting rod at a position radially outside the single shifting rod.

11. (Currently Amended) A transmission for an all-terrain vehicle comprising:

a transmission case,

a gear transmission mechanism disposed in the transmission case, the gear transmission mechanism including an axially movable shifting rod ~~and a shifting sleeve to be operated by axially moving the shifting rod to change~~ for changing gear ratio by an axial movement of the shifting rod, and

a gear-position detecting switch attached to the transmission case at a position near one axial end of the shifting rod, the gear-position detecting switch being configured to detect a neutral position when the axial end of the shifting rod axially moves to a neutral position and engages the gear-position detecting switch or a reverse position when the axial end of the

shifting rod axially moves to a reverse position and engages the gear-position detecting switch.

12. (Currently Amended) The transmission for an all-terrain vehicle according to claim 11, wherein the gear transmission mechanism can be selectively placed in one of two forward speeds, neutral and reverse by the shifting rod ~~of single~~, and

wherein the gear-position detecting switch is disposed so as to detect the neutral and reverse positions with respect to the ~~single~~ shifting rod.

13. (Original) The transmission for an all-terrain vehicle according to claim 12, wherein the gear-position detecting switch includes a neutral-position detecting switch and a reverse-position detecting switch which are independently mounted from each other.

14. (Original) The transmission for an all-terrain vehicle according to claim 13, wherein the reverse-position detecting switch is disposed opposite to one axial end of the shifting rod, and

wherein the neutral-position detecting switch is disposed near the same axial end of the shifting rod at a position radially outside of the shifting rod.

15. (New) A transmission for an all-terrain vehicle with an engine comprising:

a variable-speed drive operatively connected to the engine, and

a gear transmission mechanism operatively connected to the variable-speed drive, the gear transmission mechanism including:

a single shifting fork for selecting at least a forward high-speed ratio, a forward low-speed ratio, neutral and reverse,

a shifting lever disposed at a position below a right end part or a left end part of a handlebar at a level above the engine, the shifting lever extending substantially upward,

a single change lever shaft connected with a shifting fork, the change lever shaft being disposed on the same side as the side on which the shifting lever is disposed with respect to a

longitudinal center axis of the all-terrain vehicle , and the change lever shaft extending substantially upward at a rear end part of the engine, and

a single connecting member connecting the change lever shaft and the shifting lever, the connecting member extending at a right or left side with respect to the engine,

wherein the gear transmission mechanism further comprises a torsion coil spring wound around the change lever shaft so as to connect the change lever shaft and the shifting fork via the torsion coil spring.

16. (New) A transmission for an all-terrain vehicle with an engine comprising:

a variable-speed drive operatively connected to the engine, and

a gear transmission mechanism operatively connected to the variable-speed drive, the gear transmission mechanism including:

a single shifting fork for selecting at least a forward high-speed ratio, a forward low-speed ratio, neutral and reverse,

a shifting lever disposed at a position below a right end part or a left end part of a handlebar at a level above the engine, the shifting lever extending substantially upward,

a single change lever shaft connected with a shifting fork, the change lever shaft being disposed on the same side as the side on which the shifting lever is disposed with respect to a longitudinal center axis of the all-terrain vehicle , and the change lever shaft extending substantially upward at a rear end part of the engine, and

a single connecting member connecting the change lever shaft and the shifting lever, the connecting member extending at a right or left side with respect to the engine,

wherein the gear transmission mechanism further comprises a gate member provided with a longitudinal guide slot for guiding the shifting lever, the guide slot being provided in the same side edge of right or left with retaining parts for retaining the shifting lever at a

positions corresponding to the forward low-speed ratio, the forward high-speed ratio, neutral and reverse, and

wherein the shifting lever is supported in a spherical bearing mechanism such that the shifting lever can be tilted forward, rearward, rightward and leftward, the shifting lever being biased by a spring toward the side edge of the guide slot in which the retaining parts are provided.